



OPERATING MANUAL

FOR THE

TIE-MATIC HD+

HD38+, HD58+ & HD78+ MACHINES

110V



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VER 01.21.2020

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GENERAL INFORMATION

Thank you for purchasing the Tie-Matic HD from Plas-Ties, manufacturers of high quality twist-tying equipment.

Please familiarize yourself and/or any person operating this machine with all functions by carefully reading this manual.

The HD38, 58 and 78 machines are designed to wrap and twist tie material to close bags, bundle products and secure wire and cables. PLAS-TIES twist tie material and service should be ordered from your dealer, distributor, or:

PLAS-TIES
14272 Chambers Road
Tustin, CA 92780 USA

Telephone: (714) 542-4487
(800) 854-0137
Fax: (714) 972-2978
Email: info@plasties.com
Techsupport@plasties.com
Orders@plasties.com

CAUTION!

**DO NOT ATTEMPT TO OPERATE YOUR TIE-MATIC HD BEFORE
READING THE OPERATING INSTRUCTIONS.**

The efficiency and convenience of the Tie-Matic HD equipment reduces costly labor hours, while increasing output of securely tied products. Semi-automatic operation can deliver more than 60 tied bags or bundles per minute with minimal effort. Insert the bundle at the throat to trigger the tying mechanism and get a twist-tie. All bundles and bags are secured with 2-1/2 full twists of tie material.

EXPLANATION OF SYMBOLS



Circle with line through hands facing gears on COVER: CAUTION! Do not put your fingers or hands inside the throat of the machine as this could result in serious injury.

SAFETY INSTRUCTIONS

CAUTION:

DO NOT ATTEMPT TO OPERATE YOUR TIE-MATIC MACHINE BEFORE READING THE OPERATING INSTRUCTIONS

The operating procedures outlined in this manual are prepared to facilitate the TIE-MATIC machine.

1. **KEEP ALL SAFETY DEVICES IN PLACE** and in working order.
2. **KEEP WORK AREA CLEAN.** Cluttered areas invite accidents.
3. **DO NOT USE IN DANGEROUS ENVIRONMENT.** Do not use machines in a damp or wet location, or where any flammable or noxious fumes may exist. Keep work area well lighted.
4. **KEEP UNAUTHORIZED PEOPLE AWAY.** All unauthorized people should be kept out of work area and away from machine.
5. **DO NOT FORCE MACHINE.** It will do the job better and safer at the rate for which it was designed.
6. **USE THE RIGHT MACHINE.** Do not force machine to do a job it is not designed to do.
7. **DO NOT USE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.**
8. **DIRECT ELECTRICAL CONNECTION TO WALL SOCKET IS HIGHLY RECOMMENDED.** If use of extension cord is necessary, make sure your extension cord is UL and CE approved and in good condition. Your extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords if they become damaged.
9. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry, which may get caught in moving parts. Wear protective hair covering to contain long hair.
10. **MAINTAIN MACHINE WITH CARE.** Keep machine clean for best and safest performance. Follow instructions for lubricating and keeping machine free of lint.
11. **DISCONNECT MACHINE BEFORE SERVICING AND WHEN CHANGING SPOOL**
12. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in off position before plugging in.
13. **USE THE RECOMMENDED MATERIALS AND REPLACEMENT PARTS.** Listing of recommended material and replacement parts are found in operating manual. The use of improper material and replacement parts may result in malfunction and possible risk of injury.
14. **CHECK DAMAGED PARTS.** Before further use of the machine, any part that is damaged should be carefully checked to determine that it would operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A part that is damaged should be properly repaired or replaced.
15. **NEVER LEAVE MACHINE RUNNING UNATTENDED.** Turn the power off, and do not leave machine until it comes to a complete stop.
16. **NEVER ALLOW UNTRAINED USERS TO RUN THIS MACHINE.**
17. **IF YOU ARE UNSURE OF THE INTENDED OPERATION, STOP USING THE MACHINE.** Seek technical assistance or instruction from trained personnel or manufacturer service department.

WARRANTY

Purchaser acknowledges that there are no warranties, expressed or implied, made by **PLAS-TIES**, its distributors or sales representatives related to the Tie-Matic HD except the manufacturer's warranty against defective materials and workmanship as follows:

PLAS-TIES warrants the Tie-Matic HD to be free from defects in materials and workmanship at time of delivery. Liability under this warranty is limited to the repair or exchange of any defective part or parts of the unit providing the same is returned to **PLAS-TIES**, transportation prepaid, within **2 years or 300,000 cycles for parts and 3 years or 500,000 cycles for the motor**.

THE WARRANTY BEGINS FROM THE DATE OF INSTALLATION AT CUSTOMER SITE AND NOT DATE OF PURCHASE. IN ORDER TO ACTIVATE THE WARRANTY, THE COMPANY NAME, CONTACT, CITY/STATE, AND SERIAL NUMBER MUST BE REGISTERED WITH **PLAS-TIES** or PROOF OF PURCHASE MUST BE PROVIDED. FAILURE TO DO SO WILL RESULT IN LIMITATION OF THE FULL WARRANTY. THIS IS TO INSURE TOTAL QUALITY ASSURANCE AND 800 TOLL FREE TECHNICAL SUPPORT.

The warranty is void on any Tie-Matic HD that has been subject to negligence, accident, misuse, failure to use the equipment as instructed in the manual, or that has been tampered with.

This warranty is void if the Tie-Matic HD is used with anything other than genuine **PLAS-TIES** twist-tie material.

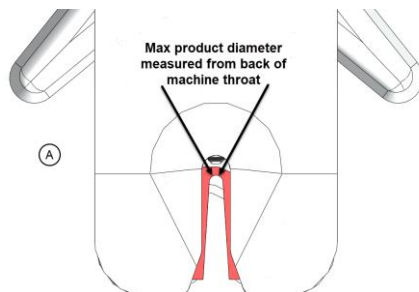
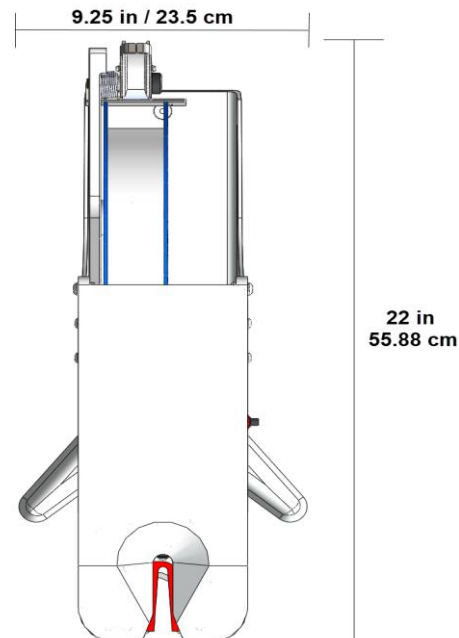
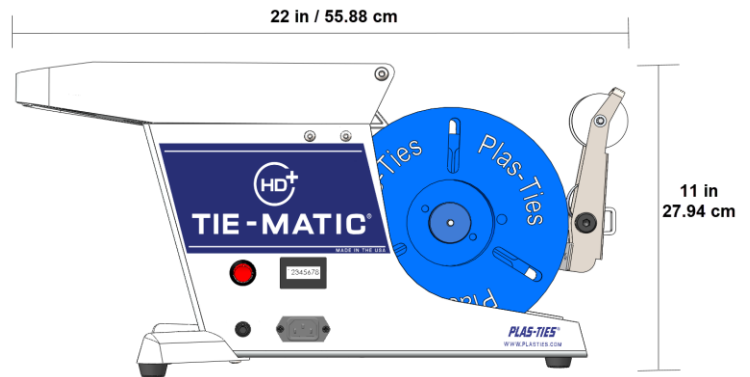
IMPORTANT: If your Tie-Matic® HD does not operate properly, please bring it to the attention of **PLAS-TIES**, or the dealer or distributor from whom it was purchased. If repairs are needed, the dealer, distributor or other representative of **PLAS-TIES** will arrange to repair or replace parts within the terms of the warranty.

Warranty coverage is limited to the Continental US, Alaska, Hawaii, Puerto Rico, and Canada.

HD+ Tie-Matic Twist-Tie Machine Specs (110v and 220v)

Made in the U.S.A.

HD+ Part #'s:	HD38plus HD58plus HD78plus HD38plus-220v HD58plus-220v HD78plus-220v
Max product Diameter: See Diagram (A)	HD38+ 0.375 in / 0.9525 cm HD58+ 0.625 in / 1.59 cm HD78+ 0.875 in / 2.22 cm
Tie Length:	HD38+ 3.68 in / 9.35 cm HD58+ 4.250 in / 10.80 cm HD78+ 4.875 in / 12.38 cm
Number of Twists:	All machines 2.5
Tie Cycle Speed:	1 second
Power:	110v VAC, 60hz, 2.0Amps 220v VAC, 60hz, 2.0 Amps
Dimensions:	22" L x 11" H x 9.25" W
Weight:	14.95 - 15.1 lbs / 6.78 - 6.84 kg
Shipping Dimensions:	25" L x 8" H x 14" W
Shipping Weight:	17.6 - 17.75 lbs / 7.98 - 8.06 kg (no spool)
Certifications:	110v: UL Certified 220V: UL Certified and CE Listed
Warranty:	Motor - 3 years or 500,000 cycles Parts - 2 years or 300,000 cycles
Twist Tie Material:	Approved Plas-Ties Material
Country or Origin:	USA
Tech Support:	www.Plasties.com/tech-info techsupport@plasties.com



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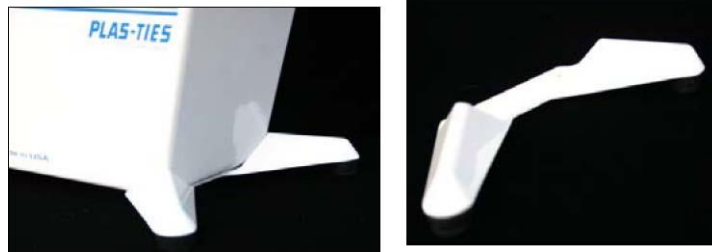
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OPERATION: MOUNTING & START UP

The Tie-Matic HD should be secured to your work table by:

1. Installing the front stabilizer on the unit. (Figure III-1)
2. Rubber suction cup feet are available for complete stability on a stainless steel table or flat surface area (Figure III-2).
3. To start the machine, plug the machine into a power source and flip the “ON/OFF” switch to “ON” position.
4. Cover must be closed to activate machine.

Front Stabilizer



(Figure III-1)

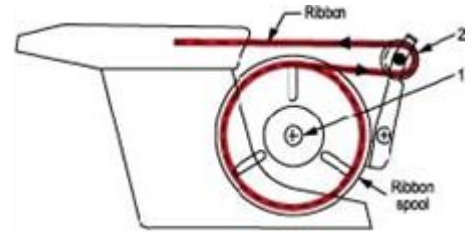
Suction Cup Feet



(Figure III-2)

OPERATION: LOADING MATERIAL (HD38 / HD58 / HD78)

Loading Material



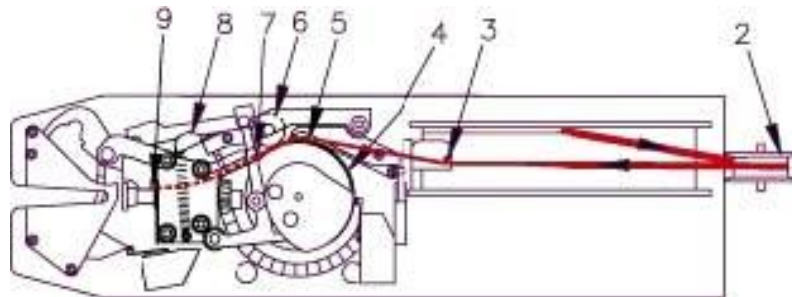
1. Turn OFF machine before loading material. Place spool with label facing out onto Spindle (1). Then tighten Knurled Nut snugly onto the spindle to secure spool.
2. Feed tie material under, then over small roller (2) on Brake Arm and pull toward machine. **(Make sure the ribbon is not twisted)**

VERY IMPORTANT (SEE IMAGE—>)

Check tie material and look for the flat side and the wire side
MAKE SURE THE FLAT SIDE OF THE MATERIAL IS POSITIONED TOWARD THE INSIDE OF THE MACHINE THROUGHOUT THE LOADING PROCESS.



3. Feed material through the Pin on Brake Arm (3), and pull approx 4 inches. Then pull the Idler Wheel (6) out using lever (8) and guide material into the Pinion Support Channel (7). (The entry is marked in bright orange with a black stripe over the opening.) Continue slowly inserting the ribbon into Pinion Support Channel (7) (for approx 2 inches) until the ribbon appears just beyond the cutter (9). **Make sure that the ribbon is under the lip of the white plastic ribbon guide at (5).** Close cover and machine is now set and ready to operate.



Note: Make sure material is straight or curved slightly towards machine (11) when inserted into Pinion Support Channel (7), not kinked or curved as per (10).



OPERATION: LOADING MATERIAL (PICTURE SEQUENCE)

LOADING MATERIAL (MODELS HD38/HD58/HD78)



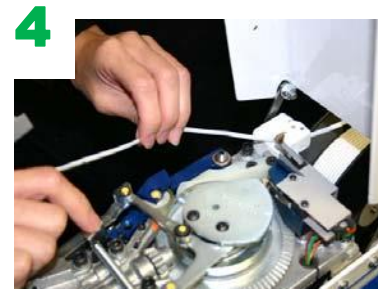
Unscrew Knurled Nut, then place spool of tie material in right hand with label facing palm



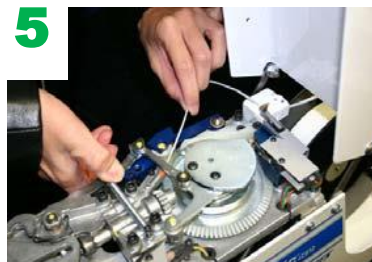
Place spool on spindle & tighten Knurled Nut snugly onto the spindle to secure spool



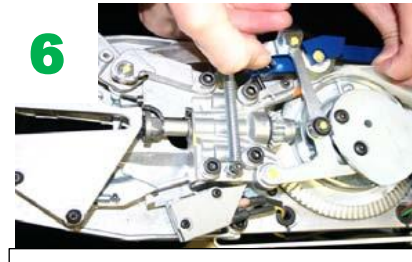
Feed material under small roller on Brake Arm, then over top of roller & pull towards machine



Feed material through the Pin on Brake Arm & pull approximately 4 inches.



Pull the Idler Wheel out, using Lever & guide material into the Pinion Support Channel



Continue slowly inserting the material into Pinion Support Channel until the material appears just beyond the Cutter. Make sure material is under the lip of the Ribbon Guide

[Click for video demonstration](#)



OPERATION: FUNCTIONAL INFORMATION**FUNCTIONAL INFORMATION FOR THE TIE-MATIC MACHINE****HOW IT WORKS**

When a product is inserted into the throat of the machine, it depresses a trigger which activates solid state timer, starting the drive gear motor. The gear motor causes the gear segment to operate through one revolution. This one revolution feeds tie material, wraps it around the product, cuts material to required length and twists ends together.

The product has now been tied and is removed by pulling toward the operator. The Tie-Matic HD will repeat tying cycle ONLY after tied product is removed and another product inserted into the throat.

MANUAL RESET TO START POSITION

As a safety precaution, the power switch should ALWAYS be turned to the OFF position when inspecting the mechanism for any reason, such as: unloading or reloading twist tie material, cleaning the machine, removing material or performing adjustments.

To manually turn mechanism, you will need to push the Release Actuator in and hold as you manually turn mechanism.

REMOVING JAMS

Pull Idler Wheel lever (blue arm) out and then remove material.

(Figure III-10)

MAINTENANCE

GENERAL

The Tie-Matic HD machine is designed for simple operation and, with reasonable care and maintenance, will provide long service.

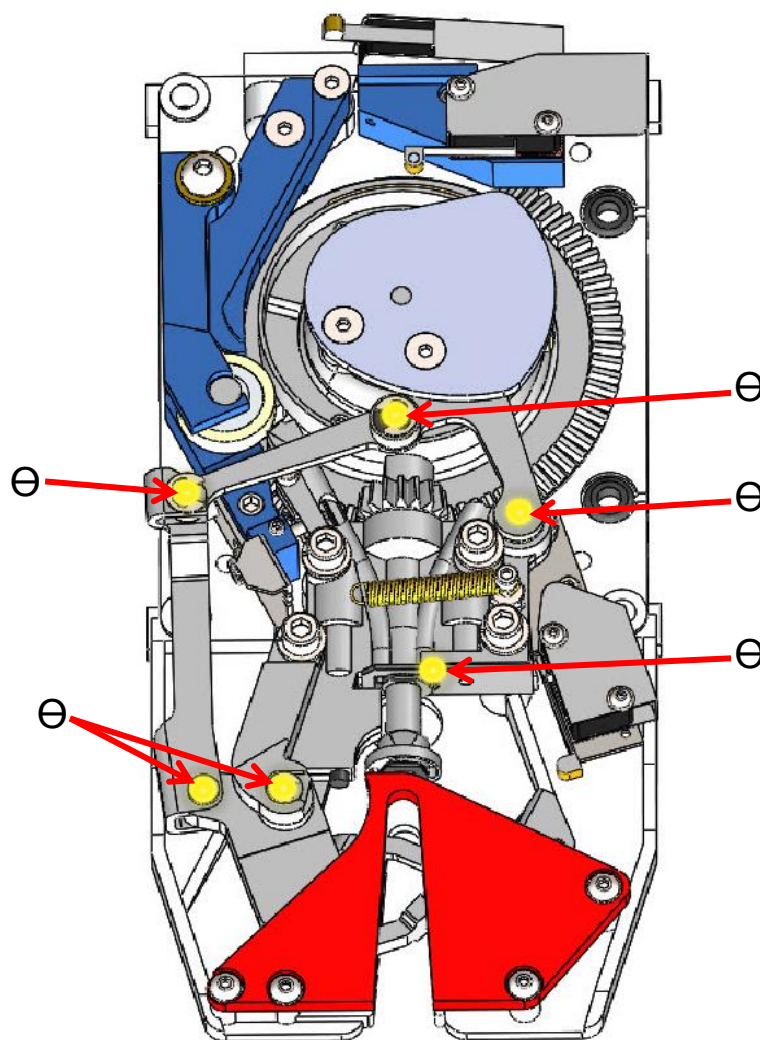
CAUTION

DO NOT OVER-OIL OR OVER-LUBRICATE MACHINE

It is important that the material feed drum and idler pressure wheel be kept free of lubricants. Excess lubrication to the drum will result in an improper tie due to material slippage, requiring a thorough cleaning of the material feed drum and idler wheel before reuse. Excess oil lubrication could damage the motor.

LUBRICATION

1. Turn OFF the machine
2. Air hose the dust from the machine
3. Lubricate the machine with 1 to 2 drops of 3-in-one multi-purpose oil every 50,000 ties.
4. Apply to areas marked with yellow dots or \ominus as shown in Figure IV-1 (6 locations).
5. Lubricate gear segment with food machinery lubricant (Bel Ray).



(Figure IV-1)

TROUBLESHOOTING

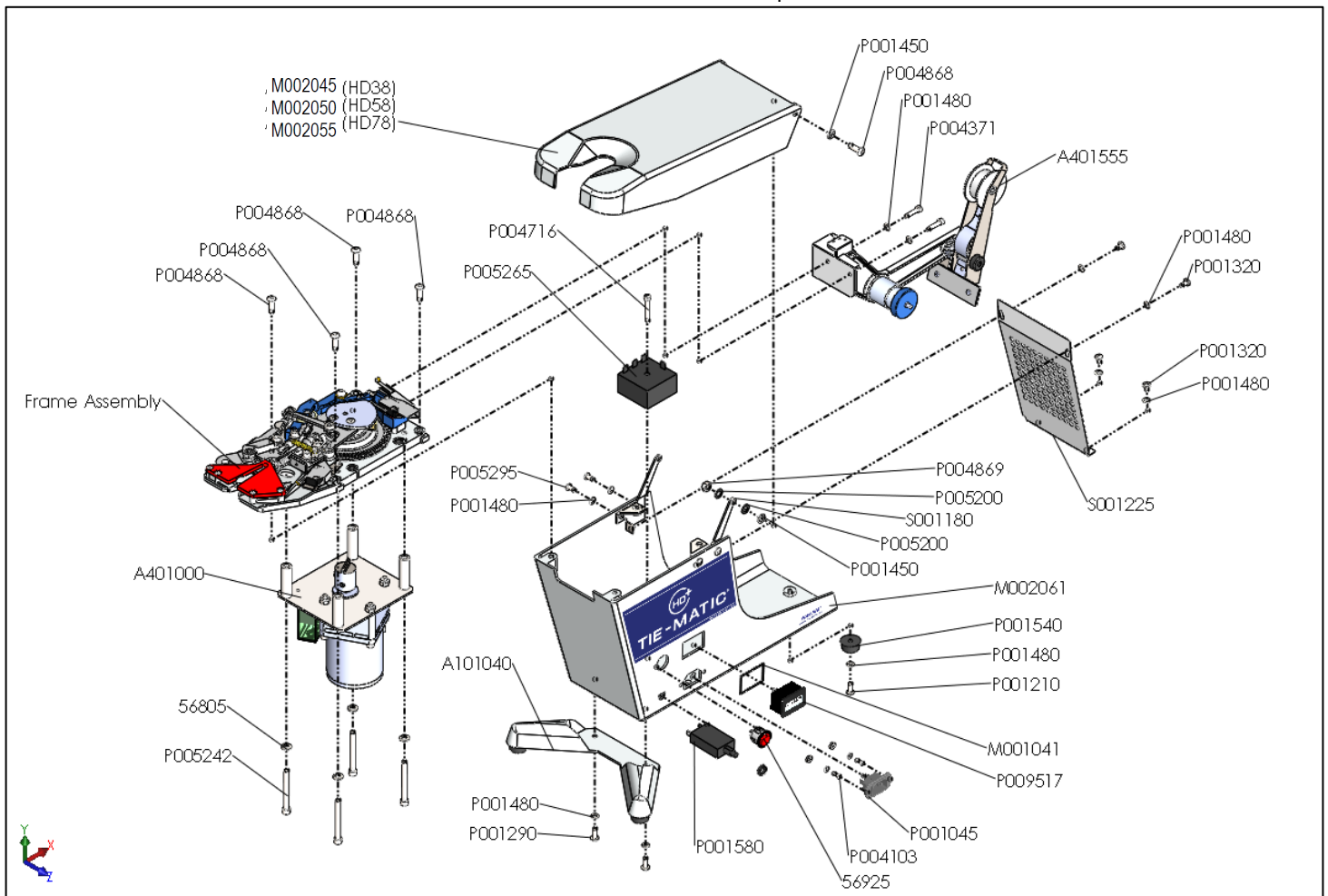
<u>Condition</u>	<u>Cause</u>	<u>Correction</u>
A. Machine jammed	<ul style="list-style-type: none"> a. Using non-Plas-Ties material b. Improper threading of material c. Oversized bundle to be tied d. Material jammed at throat of machine 	<ul style="list-style-type: none"> a. Use Plas-Ties material only b. Check spool & ribbon threading c. Do not exceed capacity diameter of the machine d. Press Release Actuator (See figure III-10 on page 12) to allow the motor to rotate, then remove the jammed material.
B. Machine circuit breaker trips	<ul style="list-style-type: none"> a. Motor locked due to jamming 	<ul style="list-style-type: none"> a. Press circuit breaker (#90 on Appendix A) and remove material causing the jam
C. Material end crushed	<ul style="list-style-type: none"> a. Cutters dull or worn out b. Improperly installed movable cutter 	<ul style="list-style-type: none"> a. Replace worn cutter b. Install properly
D. Machine won't start	<ul style="list-style-type: none"> a. Power cord not connected b. Circuit breaker tripped c. Motor malfunction d. Machine switched off e. Cover micro switch not activated. 	<ul style="list-style-type: none"> a. Connect to outlet b. Reset circuit breaker c. Replace motor d. Check ON/OFF switch e. Check switch connection
E. Missing Ties	<ul style="list-style-type: none"> a. Loosely wound ribbon on spool b. Oil or grease on material or feed drum c. Defective spool brake spring d. Pinion channel obstructed e. Package too big 	<ul style="list-style-type: none"> a. Rethread material taut b. Clean material feed drum c. Replace spring d. Clean channel f. Use larger model of machine
F. Tie length short	<ul style="list-style-type: none"> a. Oil or grease on material feed drum b. Brake arm binding c. Material snag in spool 	<ul style="list-style-type: none"> a. Clean with appropriate solvent b. Check material alignment on spool c. Take out snag and rethread
G. Machine won't stop at end of cycle	<ul style="list-style-type: none"> a. Defective limit switch b. Defective motor 	<ul style="list-style-type: none"> a. Replace switch b. Replace motor

TIE-MATIC HD ASSEMBLIES

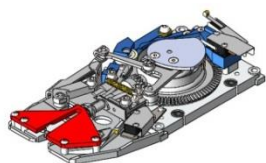
PART	DESCRIPTION	QTY
16961	6-32 X 3/8 Hex Nut Stainless Steel	2
56805	1/4 Split Lock Washer Stainless Steel	4
56809	#6 Internal Tooth Lock Washer Steel Zinc Plated	2
56925	Rocker Switch	1
A101040	HD Foot Stabilizer	1
A401000	HD+ Motor Assembly	1
A401661	HD+ Bottom Wire Harness	1
A401555	HD Brake Assembly	1
M002045	HD38+ Cover	1
M002050	HD58+ Cover	
M002055	HD78+ Cover	
M001041	HD+ Counter Gasket	1
M002061	HD+ Case	1
P001045	AC Power Inlet	1
P001290	10-32 X 1/2 Pan Head Phillips Machine Screw SS	3
P001320	10-32 X 1/4 Pan Head Phillips Machine Screw SS	5
P001450	1/4 Internal Tooth Lock Washer Steel Zinc	7
P001480	#10 Internal Tooth Lock Washer Steel Zinc	13

PART	DESCRIPTION	QTY
P001540	HD & XL2 Rubber Foot Pad	1
P001580	2 Amp Circuit Breaker AC 250v DV 28v	1
P003100	Knurled nut for HD Circuit Breaker	1
P004371	10-32 x 3/4 Socket Head Cap Screw SS	2
P004716	10-32 x 1-1/4 Socket Head Cap Screw SS	1
P004868	1/4-20 X 3/4 Button Head Socket Cap Screw SS	5
P004869	1/4-20 Nylon Hex Locknut Steel Zinc Plated	2
P005200	1/4", Triple Wave Washer	4
P005239	6-32 x 1/2 Phil Flat HD M/S 82' screw	2
P005242	1/4-20 x 2-1/4 Socket Head Cap Screw	4
P005265	HD 110v Solid State Timer	1
P005295	10-32 X 5/16 Button Head Socket Cap Screw SS	4
P009517	HD+ 8 Digit LCD Counter	1
P009519	HD+ Right Angle Power Cord (not shown)	1
S001180	HD Cover Support Bracket Hinge	1
S001225	HD+ Case Divider	1

Not shown in explosion:



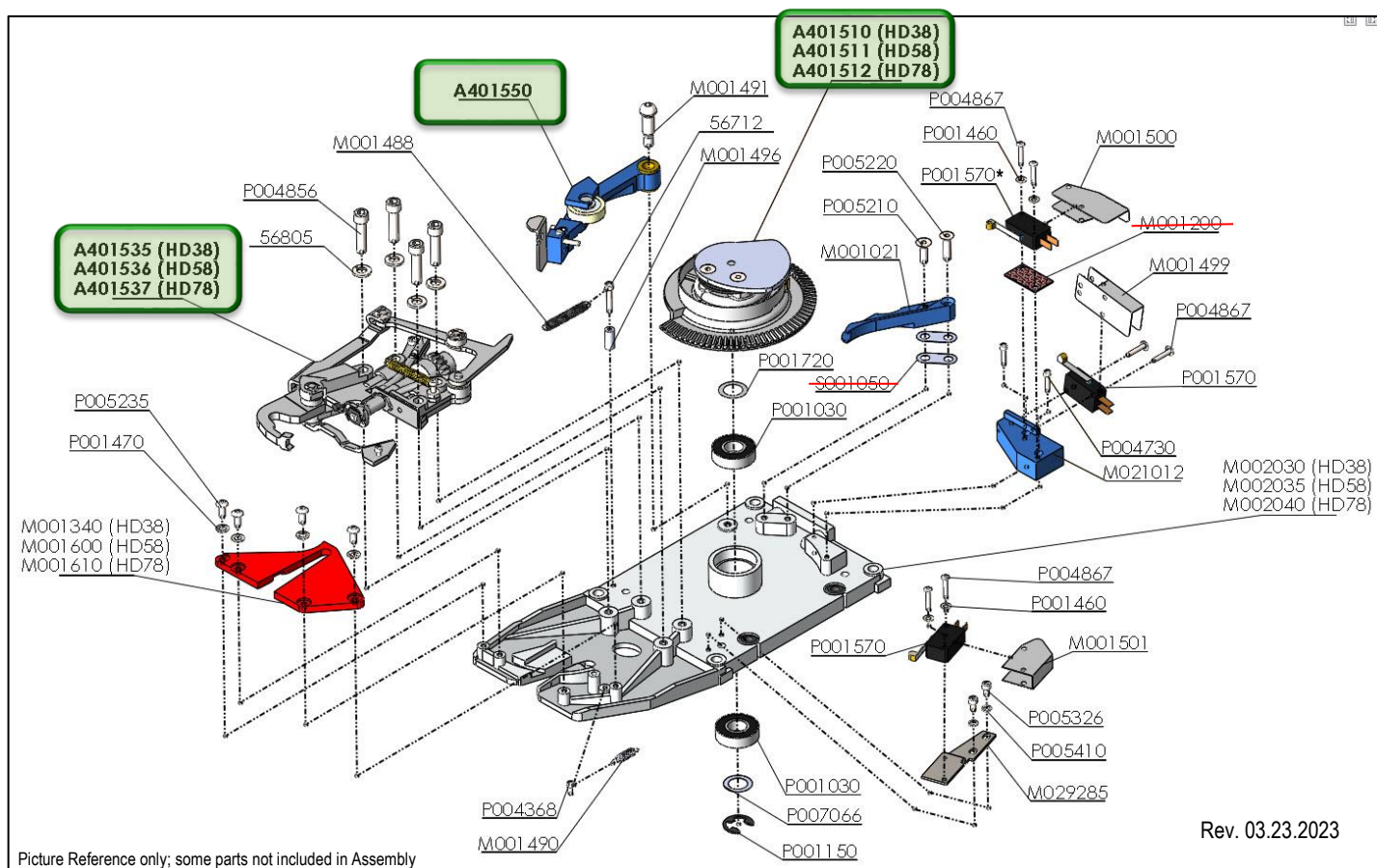
TIE-MATIC COMPLETE FRAME ASSEMBLY



A401522 (HD38)
A401527 (HD58)
A401528 (HD78)

PART #	DESCRIPTION	QTY.
56712	6-32 x 3/4" Socket Head Cap Screw	1
56805	1/4 Split Lock Washer	4
A401510	HD 38 Complete Gear Segment Assembly	1
A401511	HD 58 Complete Gear Segment Assembly	
A401512	HD78 Complete Gear Segment Assembly	
A401535	HD38 Master Pinion Support Assembly	1
A401536	HD58 Master Pinion Support Assembly	
A401537	HD78 Master Pinion Support Assembly	
A401550	Idler Wheel Assembly	1
M001021	Tape Feed Guide	1
M001200*	Switch Insulator Spacer	1
M001340	HD38 Trigger Cover	1
M001600	HD58 Trigger Cover	
M001610	HD78 Trigger Cover	
M001488	Needle Return Spring	1
M001490	HD Trigger Return Spring	1
M001491	Modified Shoulder Bolt 5/16 - 5/8	1
M001496	Needle Return Spring Spacer	1
M001499*	Cover Limit Switch Insulator	1
M001500*	Cam Limit Switch Insulator	1

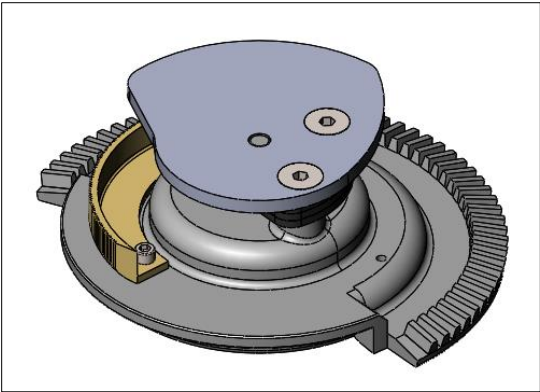
PART #	DESCRIPTION	QTY.
M001501*	Trigger Limit Switch Insulator	1
M002030	HD38 Gear Support Frame	1
M002035	HD58 Gear Support Frame	
M002040	HD78 Gear Support Frame	
M021012	Switch Mount	1
P001150	E Ring	1
P001460	Lockwasher - Internal Tooth #4	6
P001470	#8 Tooth Lock Washer	4
P001550	Grommet	2
P001570*	Micro Switch	3
P001720	Shim	1
P004730	4-40 x 1/2 Socket Head Cap Screw	2
P004856	1/4-20 X 1" Socket Head Cap Screw	4
P004867	4-40 x 5/8" Button Head Cap Screw	6
P005210	10-32 x 5/8 Flat Head Socket Screw	1
P005220	10-32 x 3/4 Flat Head Socket Screw	1
P005235	8-32 X 3/8" Button Head Cap Screw	4
P007066	Shim - 1/2" x 3/4" x 0.012	1
S001050	Tape Guide Shim	2



Rev. 03.23.2023

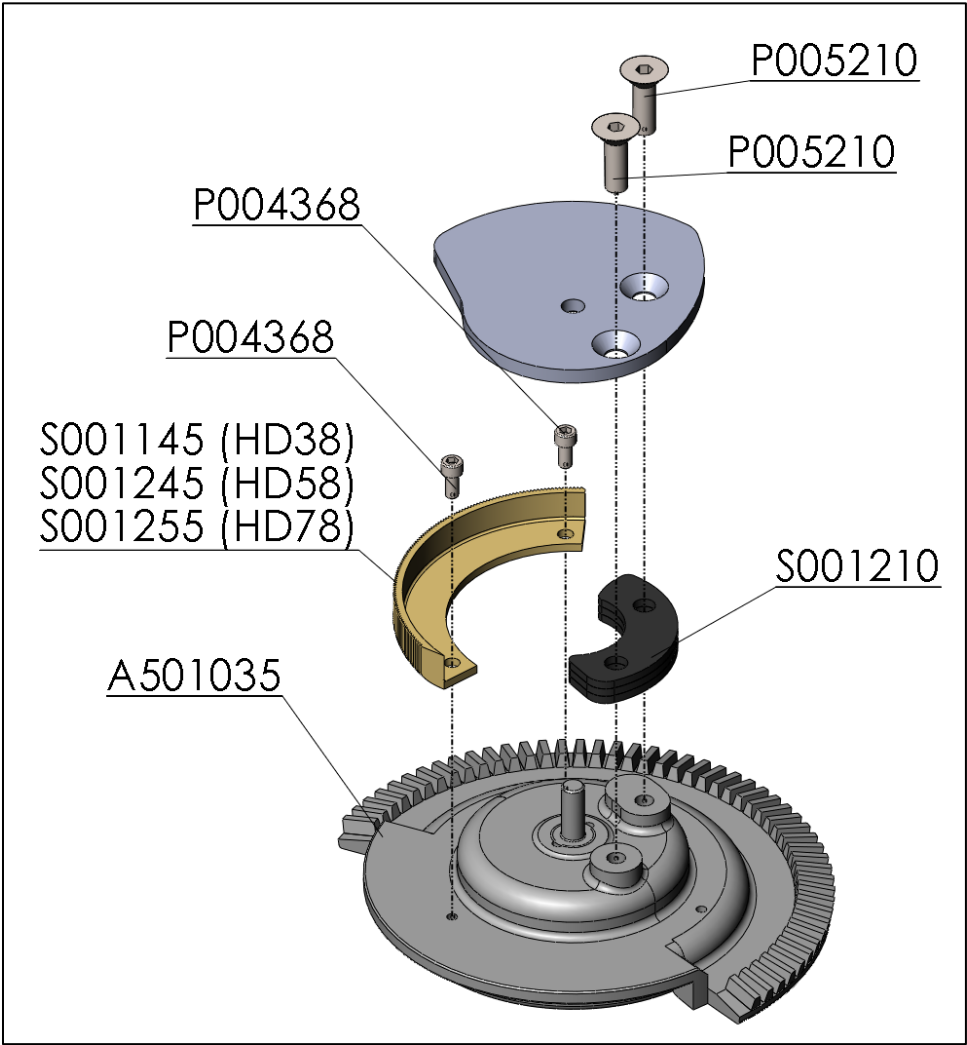
TIE-MATIC MASTER GEAR SEGMENT ASSEMBLY

A401510 (HD38)
A401511 (HD58)
A401512 (HD78)



*Part #A401510 (HD38) Shown

PART #	DESCRIPTION	QTY.
A501035	HD Series Gear Segment	1
P004368	4-40 X 1/4 Socket Head Cap Screw	3
P005210	10-32 x 5/8 Flat Head Socket Screw	2
S001145	HD38 Drum Material Feed (GOLD)	1
S001245	HD 58 Drum Material Feed (SILVER)	
S001255	HD 78 Drum Material Feed (BLACK)	
S001200	Cam Needle	1
S001210	Cam Needle Opening	1

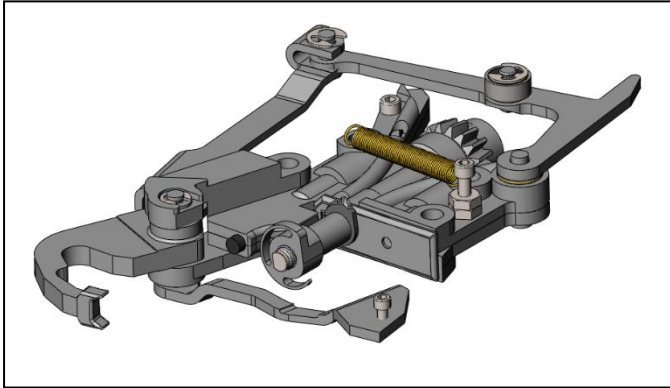


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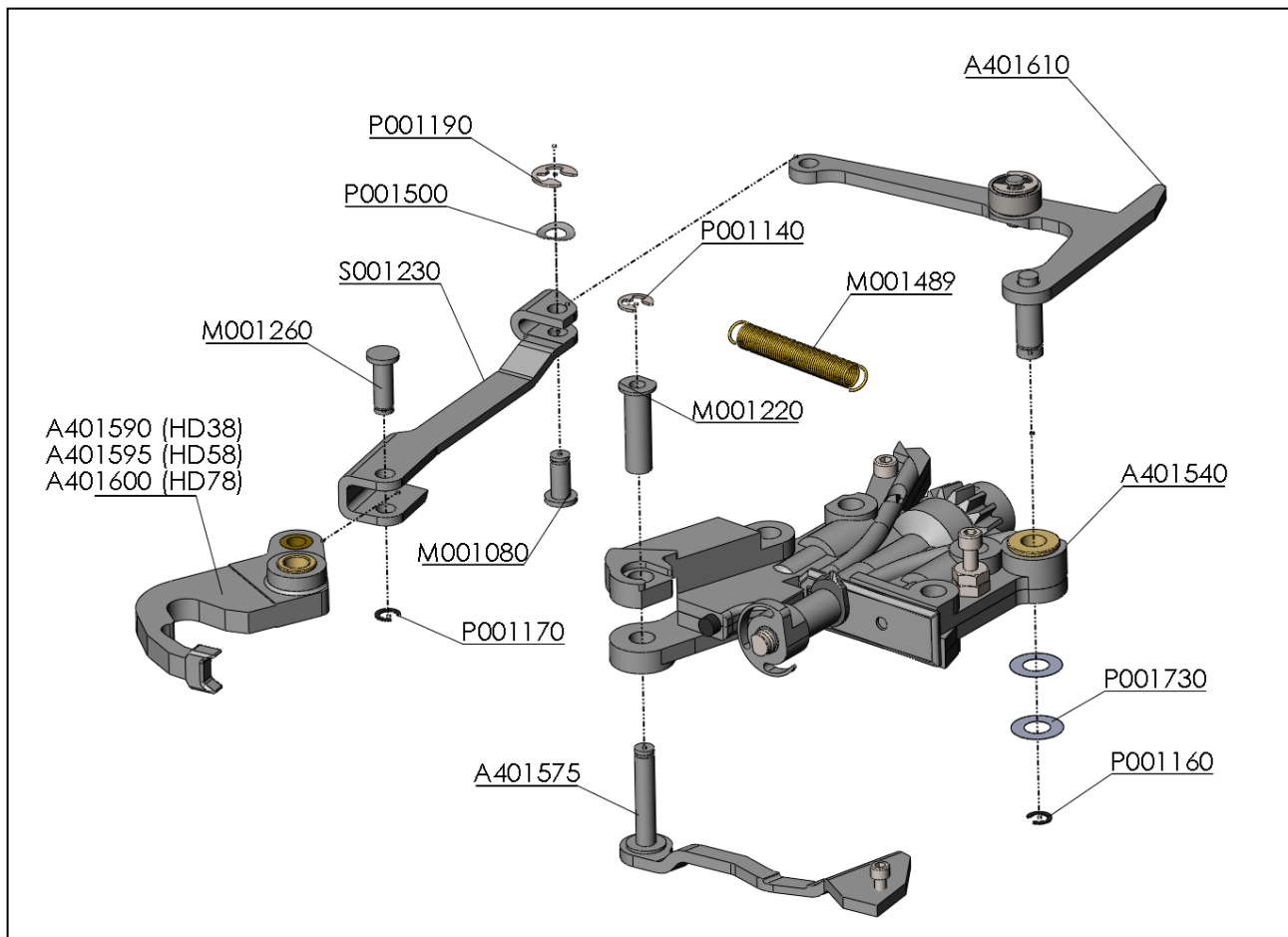
Picture Reference only; some parts not included in Assembly

TIE-MATIC MASTER PINION SUPPORT ASSEMBLY

A401535 (HD38)
A401536 (HD58)
A401537 (HD78)



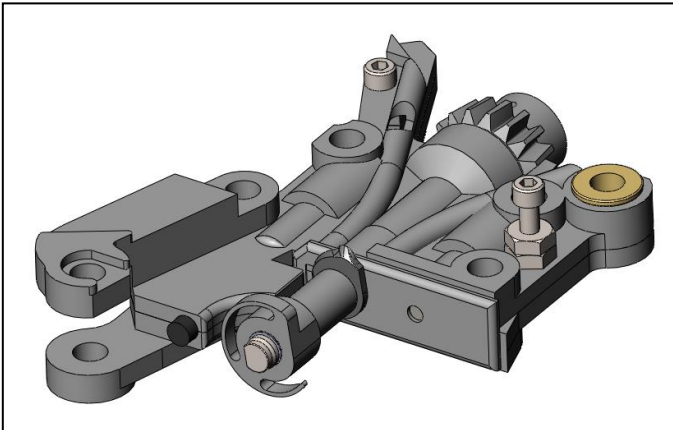
PART #	DESCRIPTION	QTY.
A401540	Pinion Support Assembly	1
A401575	Trigger Lever Assembly HD	1
A401590	HD 38 Needle Assembly	1
A401595	HD 58 Needle Assembly	
A401600	HD 78 Needle Assembly	
A401610	Actuating Lever-Needle Assembly	1
M001080	Needle Lever Clevis Pin	1
M001220	Sleeve	1
M001260	Idler wheel Pin	1
M001475	HD Tension Idler Arm Spring	1
P001140	E-Ring	1
P001160	Snap Ring	1
P001170	Retaining Ring	1
P001190	0.188 "E" Retaining Ring	1
P001500	Curved Spring Washer #10	1
P001730	Pinion Support Shim - 0.26 x 0.5 x 0.005	2
P001920	Nylon Washer #8	1
S001230	Needle Operating Link	1



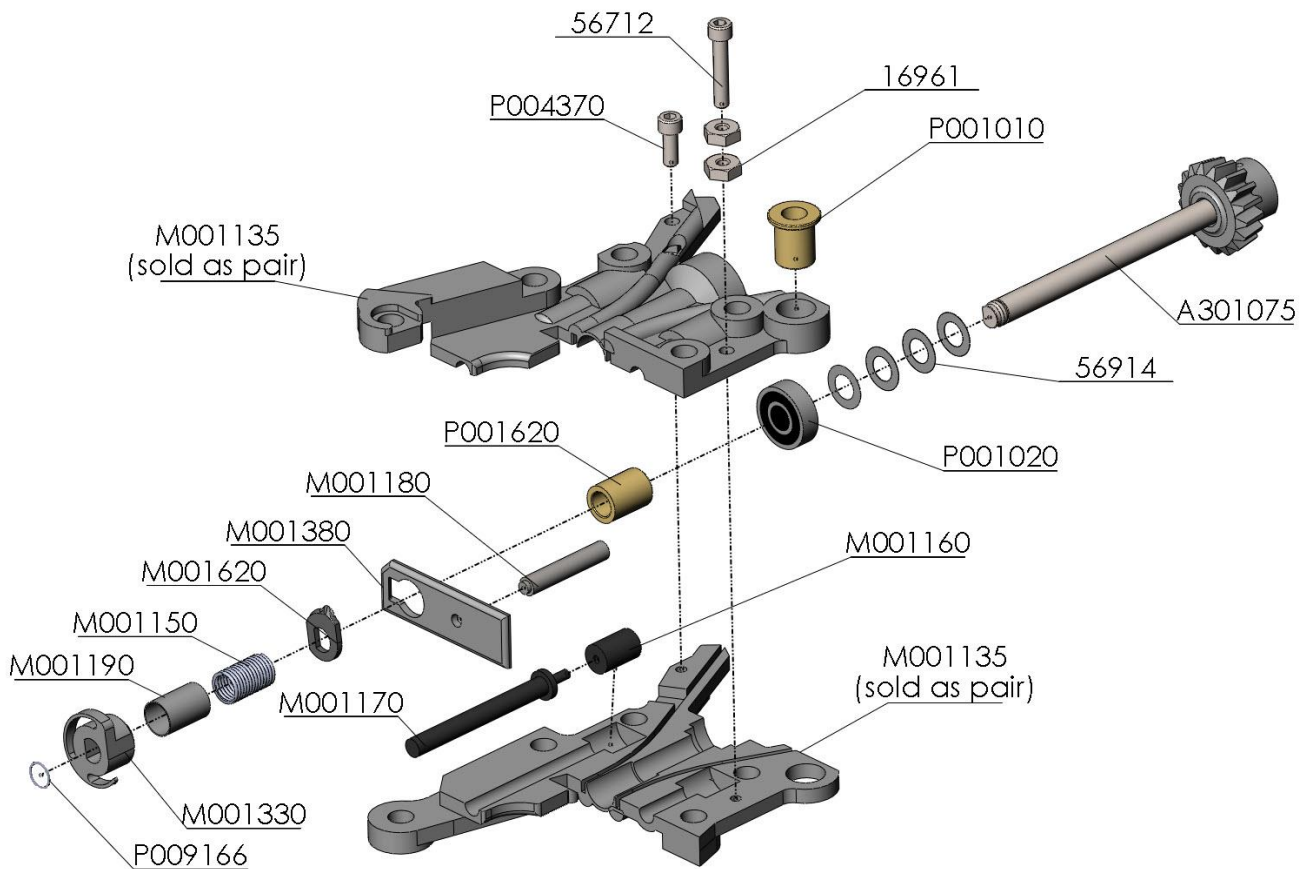
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Picture Reference only; some parts not included in Assembly

TIE-MATIC PINION SUPPORT ASSEMBLY (A401540)



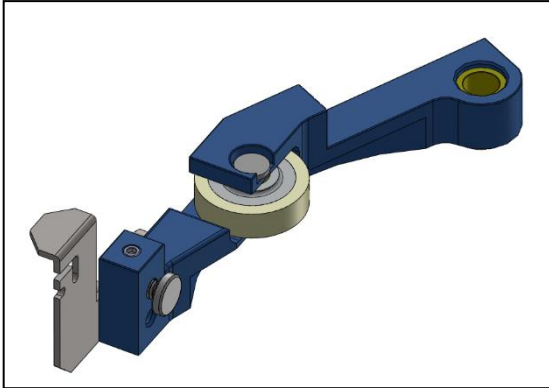
PART #	DESCRIPTION	QTY.
16961	6-32 Nut	1
56914	Shim .250 x .437 x .005	4
A301075	HD Pinion/ Shaft Assembly	1
M001135	Pinion Support (sold as pair)	1
M001150	Cutter Spring	1
M001160	Needle Stop Cushion	1
M001170		
M001180	Locating Cutter Pin	1
M001190	Spring Cover	1
M001330	Twister Ribbon	1
M001380	Cutter Plate	1
M001620	Moveable Cutter	1
P001010	Bushing	1
P001020	Bearing - Radial Ball	1
P001620	Bushing	1
P004370	6-32 x 3/8Socket Head Cap Screw	1



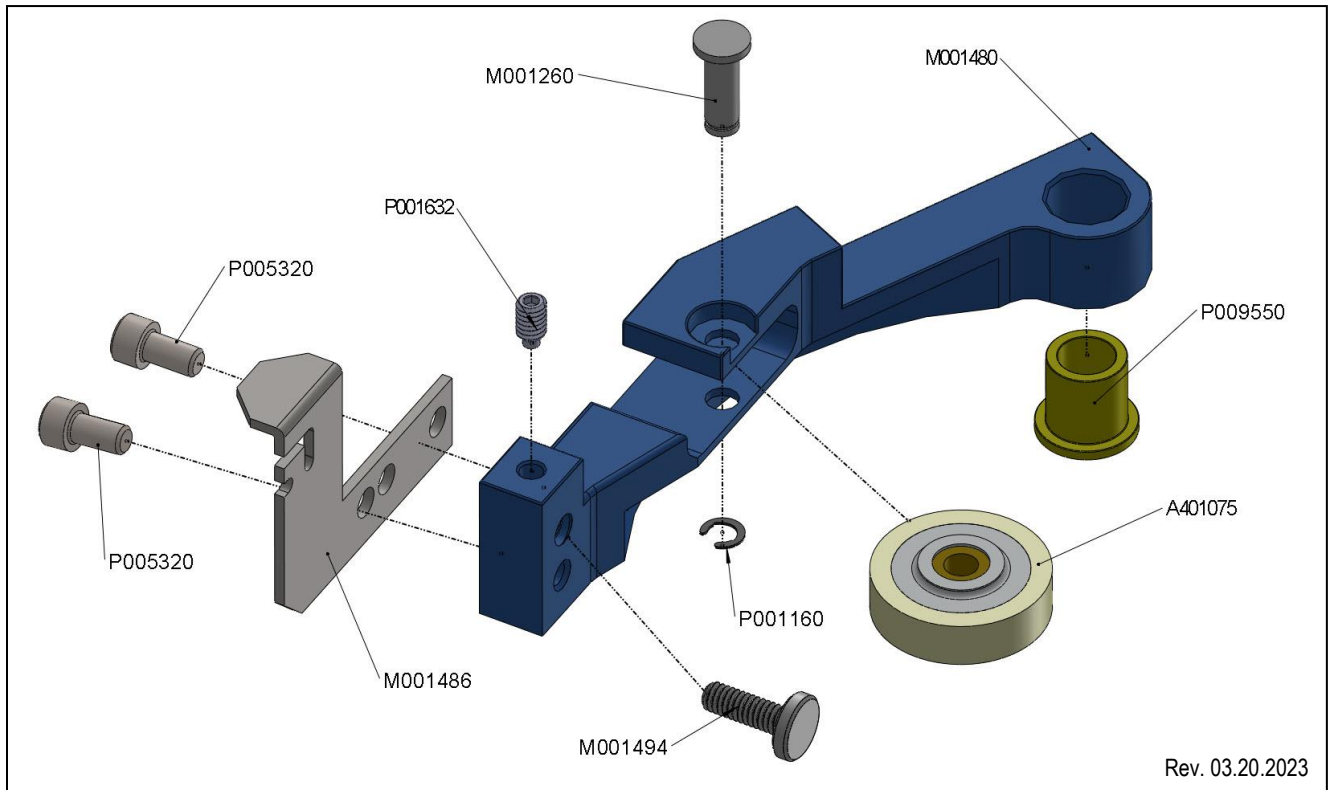
Rev. 03.20.2023

Picture Reference only; some parts not included in Assembly

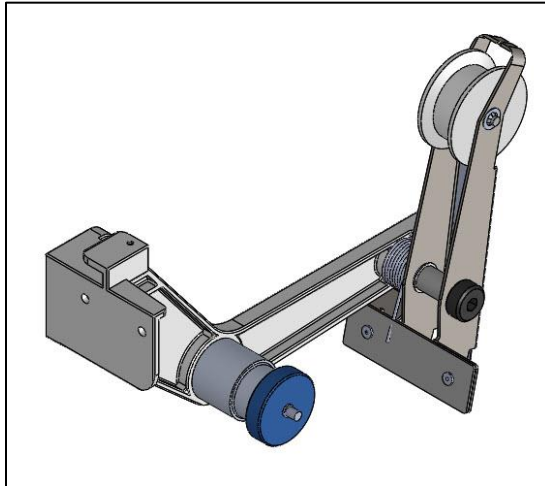
(A401550)



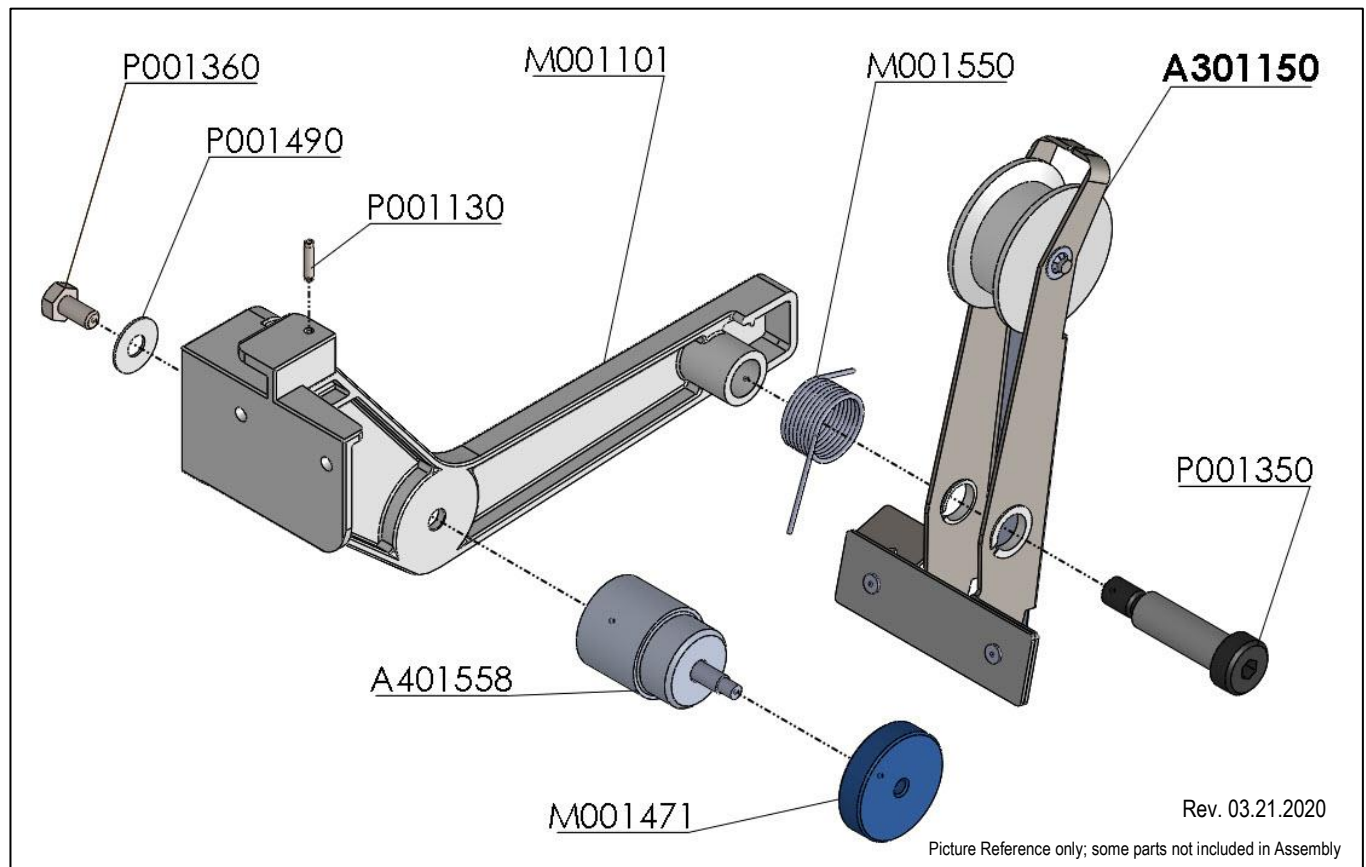
PART #	DESCRIPTION	QTY.
A401075	Wheel Complete Assembly	1
M001260	Idler wheel Pin	1
P001632	8-32 x 1/4 SS Socket Set Screw	1
P005320	8-32 x 5/16 SS Socket Head Cap Screw	
P009550	HD+ Idler Arm Flanged Bushing	
M001480	HD+ Pivot Arm	
M001486	Pivot Bracket	1
M001494	Modified Set Screw	1
P001160	Snap Ring	1



TIE-MATIC COMPLETE HD BRAKE ASSEMBLY (A401555)



PART #	DESCRIPTION	QTY.
A301150	Brake Arm Spool Assembly	1
A401558	Spindle Assembly	1
M001101	Spool Brake Beam Support	1
M001471	Knurled Knob	1
M001550	Brake Arm Spring	1
P001130	0.125 x 0.563 Roll Pin	1
P001350	3/8-16 X 1/2 X 1-1/2 Socket Head Shoulder Screw	1
P001360	1/4-20 X 1/2" Hex Bolt	1
P001490	Nylon Washer	1



TIE-MATIC

HD38, HD58 & HD78 MACHINES

110V

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